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AMENDMENT

In the Claims:

A. Kindly cancel Claim 4, without prejudice.

B. Kindly amend Claims 1, 2, 5, 12, and 14, as follows.

1. (currently amended) A method of fabricating a semiconductor device, having a nitride/high-k material/nitride gate dielectric stack, comprising:
initiating formation of the nitride/high-k material/nitride gate dielectric stack by:
depositing a first ultra-thin nitride film on a semiconductor substrate,
5 wherein the first ultra-thin nitride film is deposited by using an atomic layer deposition (ALD) technique;
depositing a high-k material on the first ultra-thin nitride film,
wherein the high-k material comprises a thin metal film, and
10 wherein the thin metal film comprises at least one material selected from a group consisting essentially of zirconium (Zr), hafnium (Hf), and titanium (Ti); and
depositing a second ultra-thin nitride film on the high-k material,
thereby forming a sandwich structure, wherein the second ultra-thin nitride film is deposited using an atomic layer deposition (ALD)
15 technique;
completing formation of the nitride/high-k material/nitride gate dielectric stack from the sandwich structure; and
completing fabrication of the device.
2. (currently amended) A method as recited in claim 1, wherein the substrate comprises a material selected from a group consisting of a silicon wafer [or] and a silicon-on-insulator (SOI) wafer.

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3. **(originally filed)** A method as recited in claim 1,
wherein the first ultra-thin nitride film comprises silicon nitride (Si_3N_4), and
wherein the first ultra-thin nitride film has a thickness in a range of 1 to 2 atomic layer(s).
4. **(canceled)**
5. **(currently amended)** A method as recited in claim 1, wherein the thin metal film further
comprises [at least one metal selected from a group consisting essentially of zirconium
(Zr), hafnium (Hf), titanium (Ti), and] tantalum (Ta).
6. **(originally filed)** A method as recited in claim 1, wherein the thin metal film comprises
a metal oxide.
7. **(previously amended)** A method as recited in claim 1,
wherein the second ultra-thin nitride film comprises silicon nitride (Si_3N_4), and
wherein the second ultra-thin nitride film has a thickness in a range of 1 to 2 atomic
layer(s).
8. **(currently amended)** A method as recited in claim 1, wherein completing formation of
the nitride/high-k material/nitride gate dielectric stack from the sandwich structure
comprises:
depositing a thick gate material on the second ultra-thin nitride film;
5 patterning the thick gate material, thereby forming a gate electrode; and
etching portions of the sandwich structure uncovered by the gate electrode, thereby
completing formation of the nitride/high-k material/nitride gate dielectric stack.
9. **(originally filed)** A method as recited in claim 1, wherein completing fabrication of the
device comprises forming of a MOSFET structure comprising the gate dielectric stack.
10. **(originally filed)** A method as recited in claim 8,
wherein the thick gate material comprises a material selected from a group consisting
essentially of polysilicon (poly-Si) and polysilicon-germanium (poly-SiGe), and
wherein the thick gate material is patterned using a material such as photoresist.

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11. (originally filed) A method as recited in claim 1, wherein completing fabrication of the device comprises:
forming a source/drain structure in the substrate and flanking the gate dielectric stack;
forming at least one spacer on at least one sidewall of the gate dielectric stack; and
5 silicidizing a shallow source/drain region as well as the high-k gate stack, thereby
forming a source/drain silicide in a shallow source/drain region of the substrate
and a gate silicide on the gate dielectric stack.
12. (currently amended) A method of fabricating a semiconductor device, having a
nitride/high-k material/nitride gate dielectric stack, comprising:
initiating formation of the nitride/high-k material/nitride gate dielectric stack by:
depositing a first ultra-thin nitride film on a semiconductor substrate,
5 wherein the first ultra-thin nitride film is deposited by using an atomic
layer deposition (ALD) technique, and
wherein the substrate comprises a material selected from a group
consisting of a silicon wafer [or] and a silicon-on-insulator (SOI)
wafer;
10 depositing a high-k material on the first ultra-thin nitride film,
wherein the high-k material comprises a thin metal film, and
wherein the thin metal film comprises at least one material selected from
a group consisting essentially of zirconium (Zr), hafnium (Hf),
and titanium (Ti); and
15 depositing a second ultra-thin nitride film on the high-k material,
thereby forming a sandwich structure, wherein the second ultra-thin
nitride film is deposited by using an atomic layer deposition
(ALD) technique;
completing formation of the nitride/high-k material/nitride gate dielectric stack from the
20 sandwich structure; and
completing fabrication of the device.

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13. **(previously amended)** A method as recited in claim 12,
wherein the first ultra-thin nitride film comprises silicon nitride (Si_3N_4), and
wherein the first ultra-thin nitride film has a thickness in a range of 1 to 2 atomic layer(s).
14. **(currently amended)** A method as recited in claim 13,
[wherein the high-k material comprises a thin metal film,]
wherein the thin metal film further comprises [at least one metal selected from a group
consisting essentially of zirconium (Zr), hafnium (Hf), titanium (Ti), and]
5 tantalum (Ta), and
wherein the thin metal film further comprises a metal oxide.
15. **(previously amended)** A method as recited in claim 14,
wherein the second ultra-thin nitride film comprises silicon nitride (Si_3N_4), and
wherein the second ultra-thin nitride film has a thickness in a range of 1 to 2 atomic
layer(s).
16. **(currently amended)** A method as recited in claim 15, wherein completing formation
of the nitride/high-k material/nitride gate dielectric stack from the sandwich structure
comprises:
depositing a thick gate material on the second ultra-thin nitride film;
5 patterning the thick gate material, thereby forming a gate electrode; and
etching portions of the sandwich structure uncovered by the gate electrode, thereby
completing formation of the nitride/high-k material/nitride gate dielectric stack.
17. **(originally filed)** A method as recited in claim 16, wherein completing fabrication of the
device comprises forming of a MOSFET structure comprising the gate dielectric stack.
18. **(originally filed)** A method as recited in claim 17,
wherein the thick gate material comprises a material selected from a group consisting
essentially of polysilicon (poly-Si) and polysilicon-germanium (poly-SiGe), and
wherein the thick gate material is patterned using a material such as photoresist.

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19. **(originally filed)** A method as recited in claim 18, wherein completing fabrication of the device comprises:

forming a source/drain structure in the substrate and flanking the gate dielectric stack;
forming at least one spacer on at least one sidewall of the gate dielectric stack; and

5 silicidizing a shallow source/drain region as well as the high-k gate stack, thereby

forming a source/drain silicide in a shallow source/drain region of the substrate
and a gate silicide on the gate dielectric stack.

20. **(previously canceled)**